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## CHEMILUMINESCENCE AS A SIGNALLING DEVICE

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**Abstract:** Reliable and unique signalling devices are a military necessity and the vagaries of nocturnal operations on land and sea engender a constant search for improvements and innovations. The phenomenon of **chemiluminescence** has been under study as a simple, reliable means of producing a unique light that might be adaptable as a signalling device. The chemical compound commonly known as luminol remains the best producer of 'cold' light. Various attempts were made to oxidize the compound using reagents that would be safe to handle and easily available for field use but would be capable of producing a visible glow. It was found that the luminol can be oxidized with any ordinary chlorine-containing bleach to produce a greenish blue light that can be made to function as a flash or continuous glow that is visible from a considerable distance. Provided water is available, the method offers a means of signalling when electrical equipment of any kind is not available or has ceased to function. The phenomenon might also be used to create bizarre effects for psychological warfare.

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